Amendment to the Claims

1. (currently amended): A poly(arylene ether) polymer including polymer repeat units of the following structure:

$$[[-(O-Ar_1-O-Ar_2-O-)_m-(-O-Ar_3-O-Ar_4-O)_n-]]$$

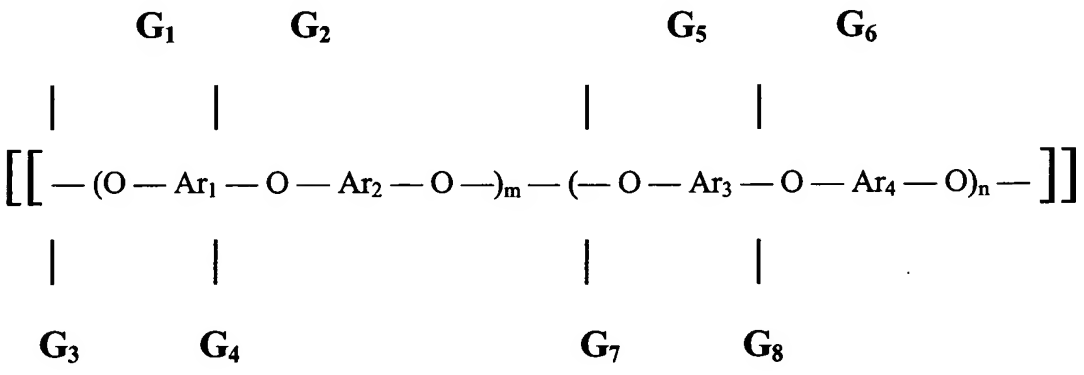
$$\underline{-(O-Ar_1-O-Ar_2)_m-(O-Ar_3-O-Ar_4)_n-}$$

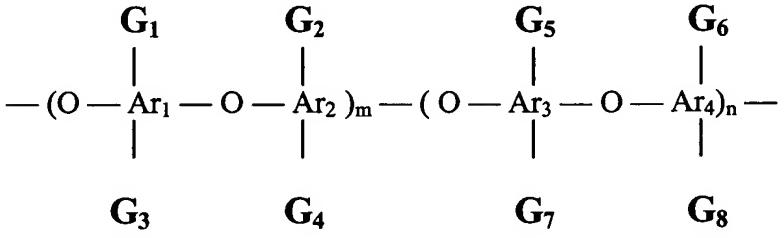
where Ar_1, Ar_2, Ar_3, and Ar_4 are identical or different aryl radicals, m is 0.05 to 0.95, n is 1-m, and at least one of the aryl radicals is grafted to at least one hydroxyalkyl group.

2. (original): The polymer of claim 1, wherein one of the aryl radicals of the polymer repeat units is grafted to one hydroxyalkyl group.

3. (original): The polymer of claim 1, wherein at least one of the aryl radicals of the polymer repeat units is grafted to more than one hydroxyalkyl group.

4. (currently amended): The polymer of claim 1, wherein the polymer repeat units have the following structure:





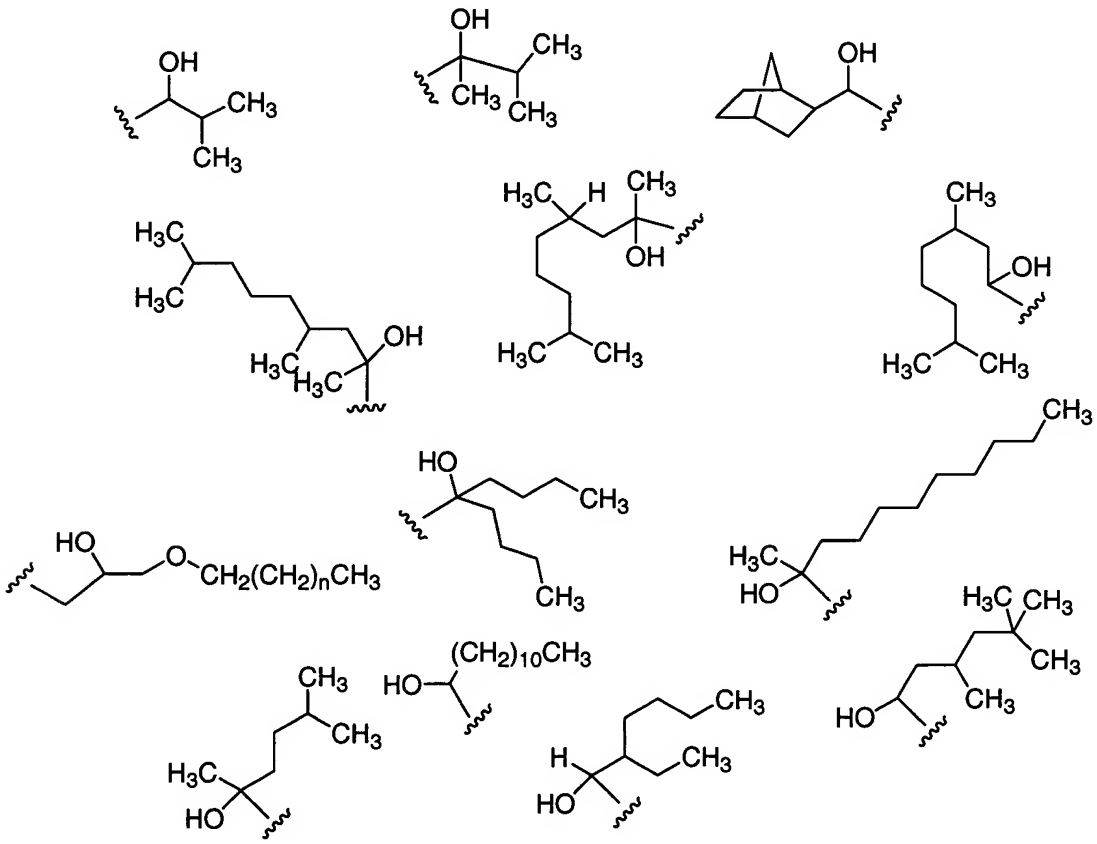
where G_1, G_2, G_3, G_4, G_5, G_6, G_7 and G_8 are identical or different species of the at least one hydroxyalkyl group.

5. (original): The polymer of claim 1, wherein an average number of hydroxyalkyl groups per polymer repeat unit is 0.01 to 8.0.

6. (original): The polymer of claim 5, wherein the average number of hydroxyalkyl groups per polymer repeat unit is 0.01 to 4.0.

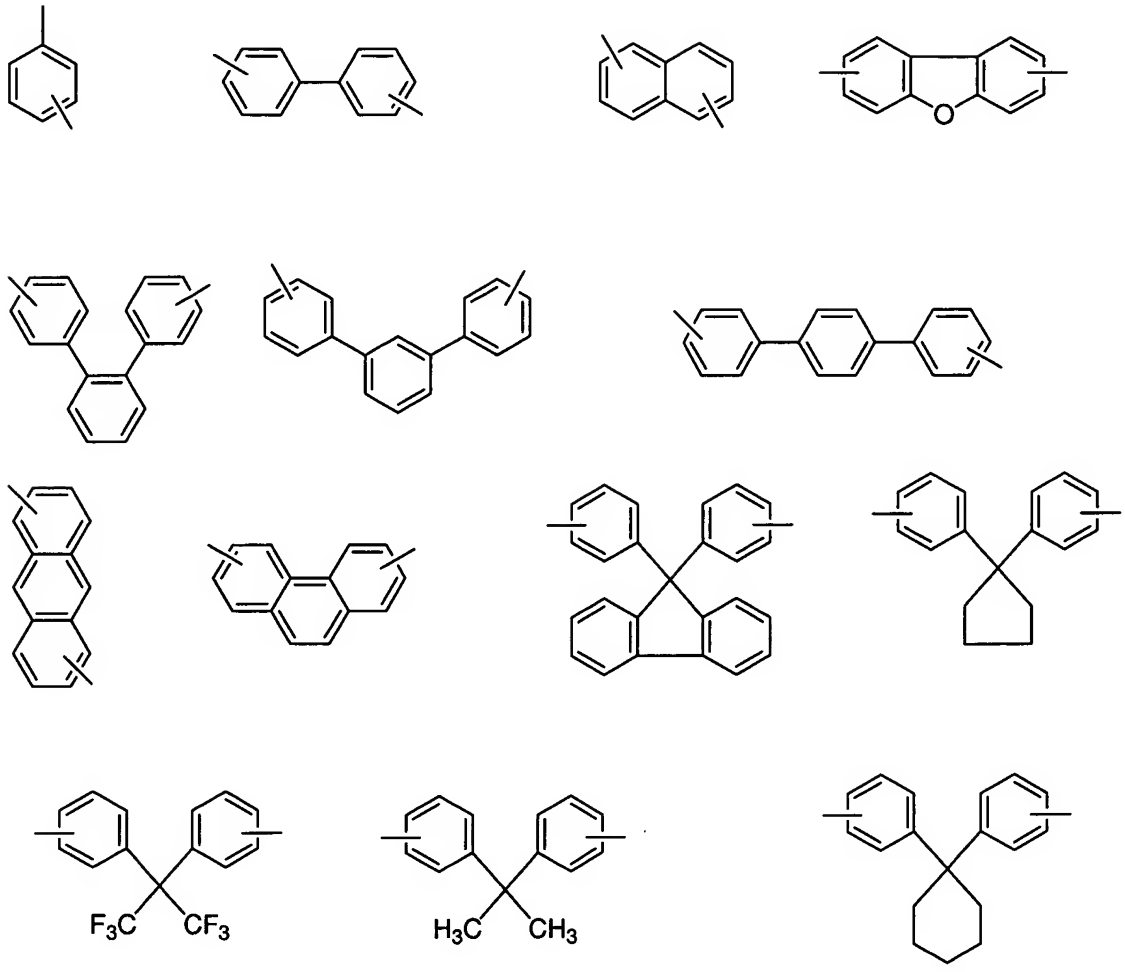
7. (original): The polymer of claim 5, wherein the average number of hydroxyalkyl groups per polymer repeat unit is 0.25 to 1.0.

8. (original): The polymer of claim 5, wherein the at least one hydroxyalkyl group is selected from the group consisting of:



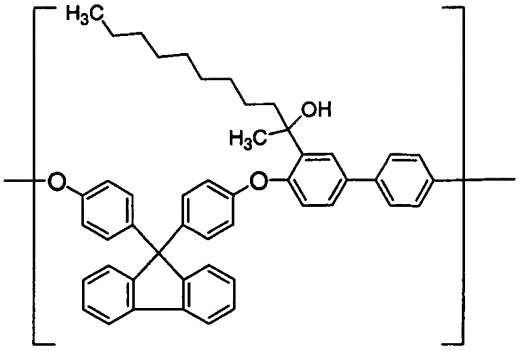
9. (original): The polymer of claim 5, wherein the at least one hydroxyalkyl group is 2-undecanol.

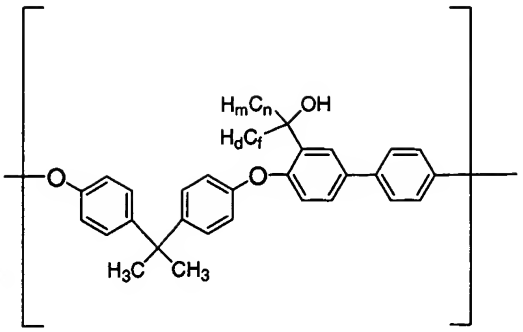
10. (original): The polymer of claim 5, wherein the aryl radicals are independently selected from the group consisting of:



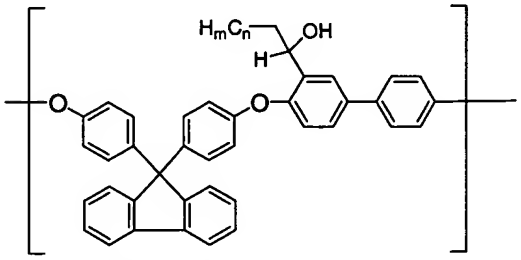
11. (original): The polymer of claim 5, wherein at least one of the aryl radicals is selected from the group consisting of 9,9-bis(4-hydroxyphenyl)-fluorene, 2,2-diphenylhexafluoropropene and 2,2-diphenylpropene.

12. (original): The polymer of claim 5, wherein the polymer repeat units are independently selected from the group consisting of:

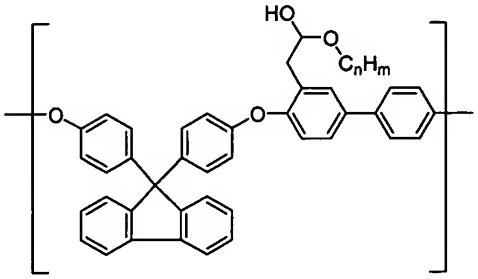




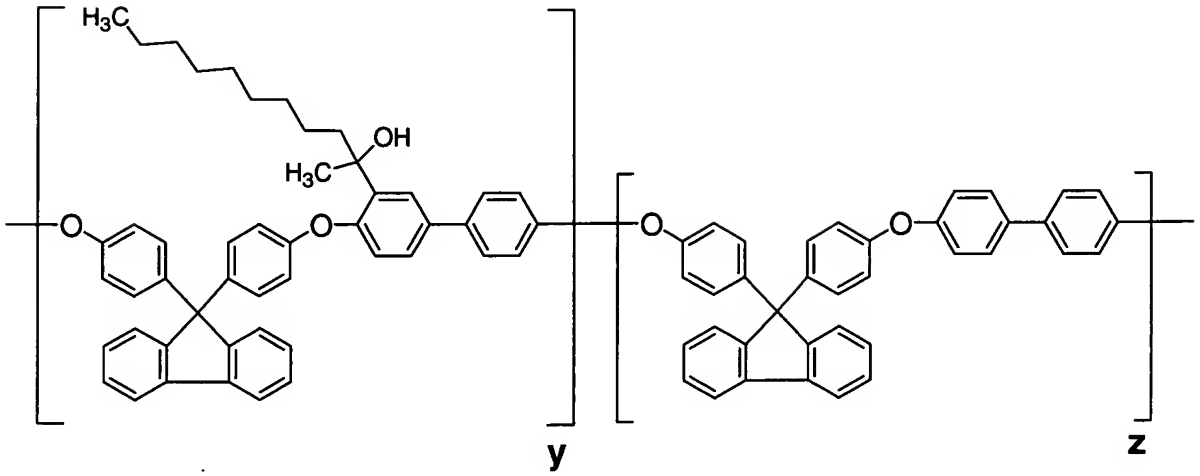
Where d,f m, and n are integers and m=4n+1 and d=4f+1



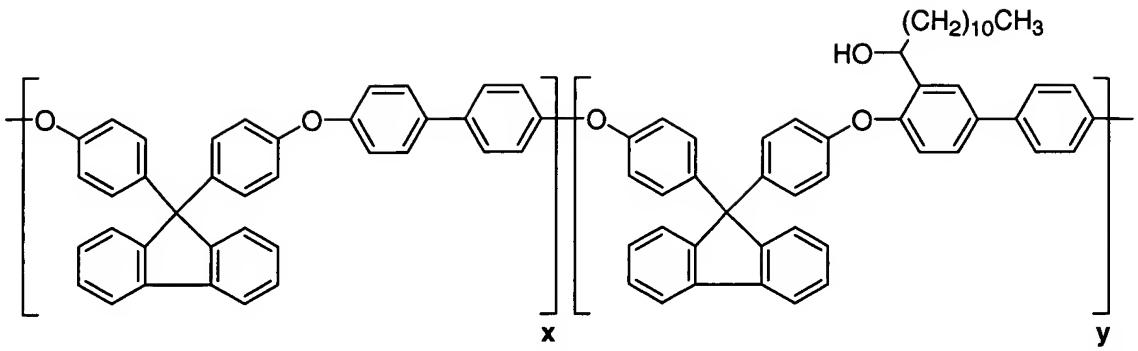
Where m and n are integers and m=4n+1



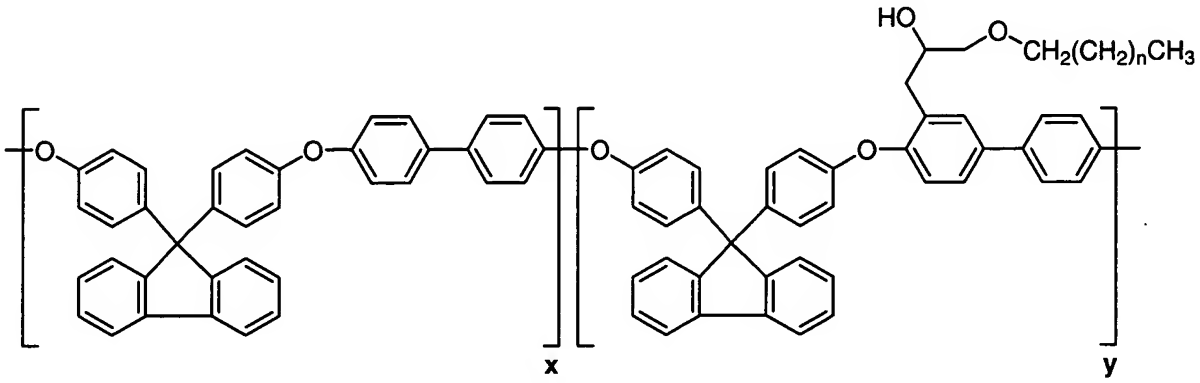
Where m and n are integers and m=4n+1



where y + z = 1 and y > 0.01



where x +y = 1.0 and y>0.01



where x +y = 1.0 and y>0.01.

13. (original): The polymer of claim 5 in an electrically conductive adhesive.

14. (original): The polymer of claim 13 in an integrated circuit.

15. (original): A composition comprising the polymer of claim 1.

16. (original): The composition of claim 15, further comprising a sufficient amount of conductive particles to render the composition suitable for use as an electrically conductive adhesive.

17. (original): The composition of claim 16, wherein the electrically conductive particles comprise at least one metal selected from the group consisting of copper, silver, nickel, gold, platinum and tin-bismuth alloy.

18. (original): The composition of claim 17, wherein each of the electrically conductive particles has a diameter less than 100 nm.

19. (original): The composition of claim 16, wherein the electrically conductive particles comprise carbon nanotubes and carbon black.

20. (original): The composition of claim 16, further comprising an adhesion promoter.

21. (original): The composition of claim 16, further comprising a plasticizer.

22. (original): The composition of claim 16, further comprising a chelating agent.

23. (original): The composition of claim 16, further comprising an epoxy resin system.

24. (original): The composition of claim 1, wherein the at least one hydroxyalkyl group is derived from an aliphatic aldehyde, an aliphatic ketone or an aliphatic glycidyl ether.

25. (withdrawn): An adhesion method comprising applying the composition of claim 16 between a first substrate and a second substrate to adhere the first substrate to the second substrate.

26. (original): An electronic package comprising the polymer of claim 1.

27. (original): The electronic package of claim 26, wherein the polymer is contained in a thermally conductive adhesive.

28. (original): The electronic package of claim 26, wherein the polymer is contained in a die attach adhesive.

29. (original): The electronic package of claim 26, wherein the polymer is contained in an encapsulant.